

can also specify the rooms to be cleaned and thus call up known data sets or respectively input essential features of such rooms. In addition, the wiping device can perform automatic positioning, by known odometric processes, in that

5 the movement distances and directions are ascertained and thus the current positions are determined. Ascertaining position can naturally also occur by some other manner, for example by laser measuring systems.

10 The wiping runs are preferably S-shaped with a preferably identical forward-lying lengthways edge. In this way large surfaces can be cleaned with few runs and minimal overlapping of the acquired web widths. The above-described movement with a constant leading edge effectively prevents dirt streaks from

15 being deposited in curves or corners.

CLAIMS

1. A device for wiping flat surfaces (2) with

a motor drive (4 - 7, 19, 26 - 29, 31, 32) and

a wiping surface (3),

characterized in that during movement of the device (1, 9, 10, 25, 30, 33) by the drive (4 - 7, 19, 26 - 29, 31, 32) the drive (4 - 7, 19, 26 - 29, 31, 32) lies inside a web width covered by the wiping surface (3).
2. The device as claimed in claim 1, characterized in that the drive (4-7, 19, 26-29, 31, 32) is arranged over the wiping surface (3).
3. The device as claimed in claim 1 or 2, in which the outer dimensions of the device (1, 9, 10, 25, 30, 33) in projection onto the surface (2) to be wiped show a ratio of the longest to the shortest side of at least 1 : 2.
4. The device as claimed in any one of claims 1 to 3, in which the outer dimensions of the device (1, 9, 10, 25, 30, 33) in projection onto the surface (2) to be wiped are restricted by the wiping surface (3).

5. The device as claimed in any one of the preceding claims, which is designed to move over the surface (2) to be wiped by means of the drive (4 - 7, 19, 26 - 29, 31, 32) such that the same long side of the wiping surface (3) is in front during a run.
6. The device as claimed in any one of the preceding claims, in which the wiping surface (3) can be moved oscillating relative to the rest of the device (1, 9, 10, 25, 30, 33) during wiping.
7. The device as claimed in any one of the preceding claims, which has a wiping cloth (13, 14) on each of two opposite sides.
8. The device as claimed in any one of the preceding claims, which the wiping surface (3) is continuous.
9. The device as claimed in any one of the preceding claims, in which the drive (4 - 7, 19, 26 - 29, 31, 32) has a motor-driven inertial mass (4, 19, 27) mobile relative to the base and

is designed to drive the device (1, 9, 10, 25, 30, 33) by moving the inertial mass (4, 19, 27) relative to the base

(1, 9, 10, 25, 30, 33), in that in a part of these movements static friction holding the device (1, 9, 10, 25, 30, 33) on the surface (2) is overcome by mass inertia of the inertial mass (4, 19, 27) and this does not occur in another part of these movements,

whereby the movements of the inertial mass (4, 19, 27) relative to the base (1, 9, 10, 25, 30, 33) are altogether iterative.

10. The device as claimed in any one of claims 1 to 9, characterized in that the wiping surface (3) makes up at least the entire side of the device (1, 9, 10, 25, 30, 33) facing the surface (2) to be wiped.
11. The device as claimed in any one of claims 1 to 10, characterized in that the wiping surface (3) projects laterally opposite the edges of its holding surface.
12. A unit for treating floors (2) with a mobile device (1, 9, 10, 25, 30, 33) as claimed in any one of the preceding claims and with a base station (35, 39) for regenerating the mobile device (1, 9, 10, 25, 30, 33), whereby the base station (35, 39) has a motor-driven transport device (40, 42 - 44, 49), which is configured to transport the mobile device (1, 9, 10, 25, 30, 33) for regenerating

into the base station (35, 39) and to transport it out of the base station (35, 39).

13. A process for wiping flat surfaces (2) with a device (1, 9, 10, 25, 30, 33) as claimed in any one of claims 1 - 9 or a unit as claimed in Claim 1, in which the flat surface (2) is wiped by the motor-driven device (1, 9, 10, 25, 30, 33) and a web width is covered by the wiping surface (3) of the device (1, 9, 10, 25, 30, 33), inside which the drive (4 - 7, 19, 26 - 29, 31, 32) lies.